

Regional HIV/AIDS Epidemiologic Profile of Essex County, Massachusetts: 2011

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2010: Essex County, Massachusetts²

	N	%
People Living with HIV/AIDS	1,438	60%
People Reported with HIV or AIDS who are Deceased	943	40%
Total Number of People Reported with HIV Infection or AIDS	2,381	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10¹: Essex County, Massachusetts²

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Essex County, MA	6.8	51
Massachusetts Total	9.4	607.3

HIV/AIDS prevalence rate on 12/31/10	Rate per 100,000	Number of people living with HIV/AIDS
Essex County, MA	191.6	1,438
Massachusetts Total	273.7	17,621

¹ The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2000–2009, Essex County, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2000	1,036	33	94
2001	1,072	39	75
2002	1,124	34	86
2003	1,170	33	79
2004	1,227	21	78
2005	1,274	23	70
2006	1,305	26	57
2007	1,319	33	47
2008	1,360	14	55
2009	1,393	18	51

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

Table 4. People diagnosed with HIV infection from 2007–2009¹ and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Essex County, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	97	63%	944	66%
Female	56	37%	494	34%
Place of Birth:	N	%	N	%
US	83	54%	867	60%
Puerto Rico/US Dependency ³	21	14%	252	18%
Non-US	49	32%	319	22%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	51	33%	655	46%
Black (non-Hispanic)	29	19%	229	16%
Hispanic/Latino	69	45%	526	37%
Other/Undetermined ⁴	4	3%	28	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	46	30%	415	29%
Injection Drug Use (IDU)	15	10%	307	21%
MSM/IDU	-- ⁷	-- ⁷	39	3%
Heterosexual Sex	24	16%	236	16%
Other	-- ⁷	-- ⁷	41	3%
Total Undetermined	66	43%	400	28%
• Presumed Heterosexual Sex ⁵	19	12%	143	10%
• Undetermined ⁶	47	31%	257	18%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2010	
Under 13	0	0%	5	<1%
13 to 19	5	3%	22	2%
20 to 24	19	12%	29	2%
25 to 29	21	14%	51	4%
30 to 34	24	16%	88	6%
35 to 39	13	8%	122	8%
40 to 44	26	17%	263	18%
45 to 49	22	14%	330	23%
50 to 54	12	8%	261	18%
55 to 59	6	4%	133	9%
60+	5	3%	134	9%
Total	153	100%	1,438	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

⁴ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity

⁵ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁶ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁷ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Essex County, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	514	54%	141	29%
Black (non-Hispanic)	115	12%	114	23%
Hispanic/Latino	299	32%	227	46%
Other/Undetermined ²	16	2%	12	2%
Total	944	100%	494	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Essex County, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	415	44%	N/A	N/A
Injection drug use (IDU)	196	21%	111	22%
MSM/IDU	39	4%	N/A	N/A
Heterosexual sex	60	6%	176	36%
Other	24	3%	17	3%
Total Undetermined	210	22%	190	38%
• Presumed heterosexual sex ²	N/A	N/A	143	29%
• Undetermined ³	210	22%	47	10%
Total	944	100%	494	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Essex County, Massachusetts¹, 2000–2009²

	Male		Female		Total
	N	%	N	%	
2000	63	67%	31	33%	94
2001	46	61%	29	39%	75
2002	56	65%	30	35%	86
2003	49	62%	30	38%	79
2004	48	62%	30	38%	78
2005	45	64%	25	36%	70
2006	40	70%	17	30%	57
2007	27	57%	20	43%	47
2008	38	69%	17	31%	55
2009	32	63%	19	37%	51

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Essex County, Massachusetts¹, 2000–2009²

	White NH		Black NH		Hispanic/Latino		Other/ Undetermined ³		Total
	N	%	N	%	N	%	N	%	
2000	36	38%	18	19%	33	35%	7	7%	94
2001	31	41%	19	25%	22	29%	3	4%	75
2002	31	36%	21	24%	31	36%	3	3%	86
2003	28	35%	19	24%	32	41%	0	0%	79
2004	30	38%	18	23%	30	38%	0	0%	78
2005	24	34%	19	27%	25	36%	2	3%	70
2006	24	42%	13	23%	20	35%	0	0%	57
2007	18	38%	6	13%	22	47%	1	2%	47
2008	19	35%	11	20%	22	40%	3	5%	55
2009	14	27%	12	24%	25	49%	0	0%	51

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity. NH = Non-Hispanic

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Essex County, Massachusetts¹, 2000–2009²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2000	52	55%	15	16%	27	29%	94
2001	39	52%	13	17%	23	31%	75
2002	44	51%	15	17%	27	31%	86
2003	40	51%	14	18%	25	32%	79
2004	46	59%	9	12%	23	29%	78
2005	34	49%	5	7%	31	44%	70
2006	32	56%	6	11%	19	33%	57
2007	23	49%	9	19%	15	32%	47
2008	33	60%	6	11%	16	29%	55
2009	27	53%	6	12%	18	35%	51

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Essex County, Massachusetts¹, 2000–2009²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2000	24	26%	18	19%	-- ⁵	-- ⁵	18	19%	-- ⁵	-- ⁵	8	9%	22	23%	94
2001	21	28%	7	9%	-- ⁵	-- ⁵	16	21%	-- ⁵	-- ⁵	13	17%	12	16%	75
2002	21	24%	15	17%	-- ⁵	-- ⁵	9	10%	-- ⁵	-- ⁵	16	19%	24	28%	86
2003	20	25%	21	27%	0	0%	9	11%	-- ⁵	-- ⁵	7	9%	21	27%	79
2004	20	26%	12	15%	-- ⁵	-- ⁵	10	13%	-- ⁵	-- ⁵	12	15%	20	26%	78
2005	20	29%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	12	17%	0	0%	13	19%	18	26%	70
2006	17	30%	7	12%	-- ⁵	-- ⁵	11	19%	-- ⁵	-- ⁵	8	14%	13	23%	57
2007	11	23%	9	19%	0	0%	7	15%	0	0%	8	17%	12	26%	47
2008	19	35%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	11	20%	0	0%	5	9%	14	25%	55
2009	16	31%	-- ⁵	-- ⁵	0	0%	6	12%	-- ⁵	-- ⁵	6	12%	21	41%	51

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Essex County, Massachusetts¹, 2000–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2000	38	94	40%
2001	35	75	47%
2002	32	86	37%
2003	23	79	29%
2004	40	78	51%
2005	21	70	30%
2006	21	57	37%
2007	20	47	43%
2008	19	55	35%
2009	20	51	39%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Essex County, Massachusetts,¹ 2007–2009²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	41	97	42%
Female	18	56	32%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	16	51	31%
Black (non-Hispanic)	6	29	21%
Hispanic/Latino	35	69	51%
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	28	83	34%
Puerto Rico/US Dependencies ⁴	14	21	67%
Non-US	17	49	35%
Total	59	153	39%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

⁴ Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

⁵ Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11